

Health Information Technology

Diffusion Among Maryland Acute Care Hospitals

Commission Brief

March 17, 2016



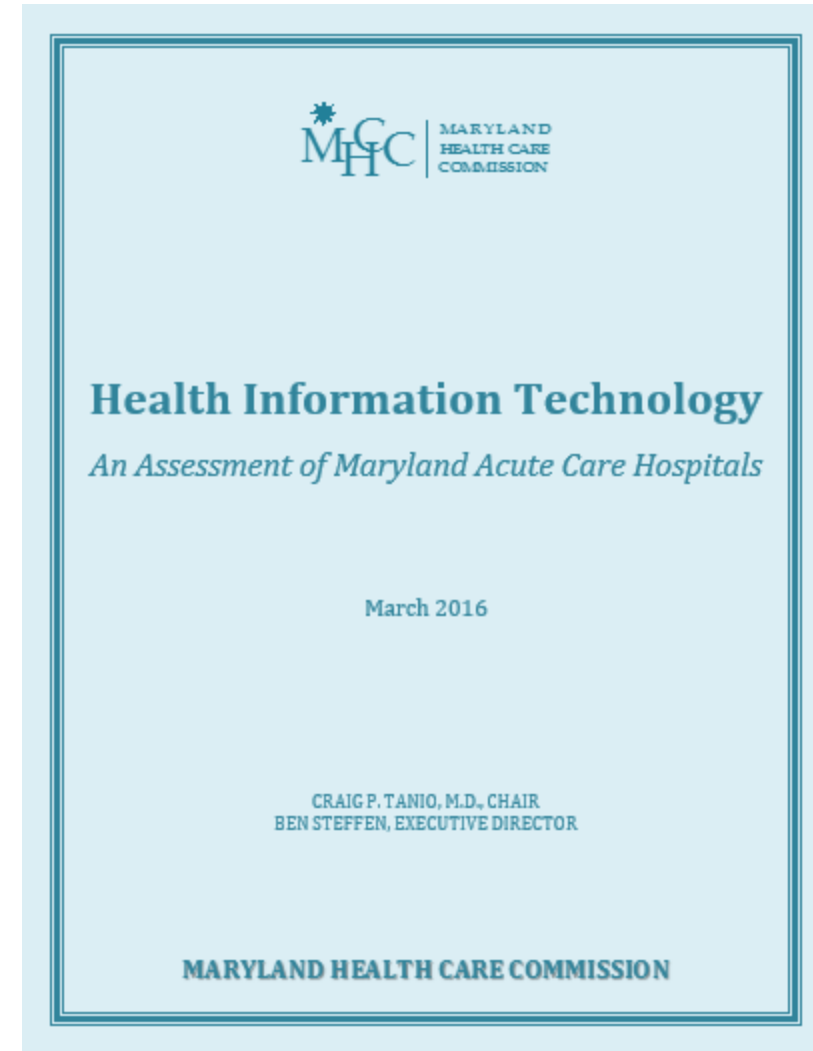
The MARYLAND
HEALTH CARE COMMISSION

Background

- The Maryland Health Care Commission (MHCC) conducts an annual assessment to identify current trends and the future direction of health information technology (health IT) use among Maryland acute care hospitals in comparison to hospitals nationally
- Over the years, hospital Chief Information Officers (CIOs) report the assessment findings have influenced health IT adoption and encouraged competition around the diffusion of health IT within hospitals
- The MHCC uses the information to help hospital CIOs formulate recommendations for expanding health IT system functionality, developing policies around privacy and security, and crafting audit strategies
- Each year, MHCC enhances the assessment based on trends in the health care industry; next year, MHCC will identify cybersecurity activities of hospitals and assess how hospitals use health IT to support value-based care

The Hospital Health IT Assessment

- All 47 acute care hospitals in the State voluntarily participate; information is self-reported by CIOs
- Evaluates hospital adoption of health IT and implementation plans
- Identifies hospital participation in the Medicare and Medicaid Electronic Health Record (EHR) Incentive Programs



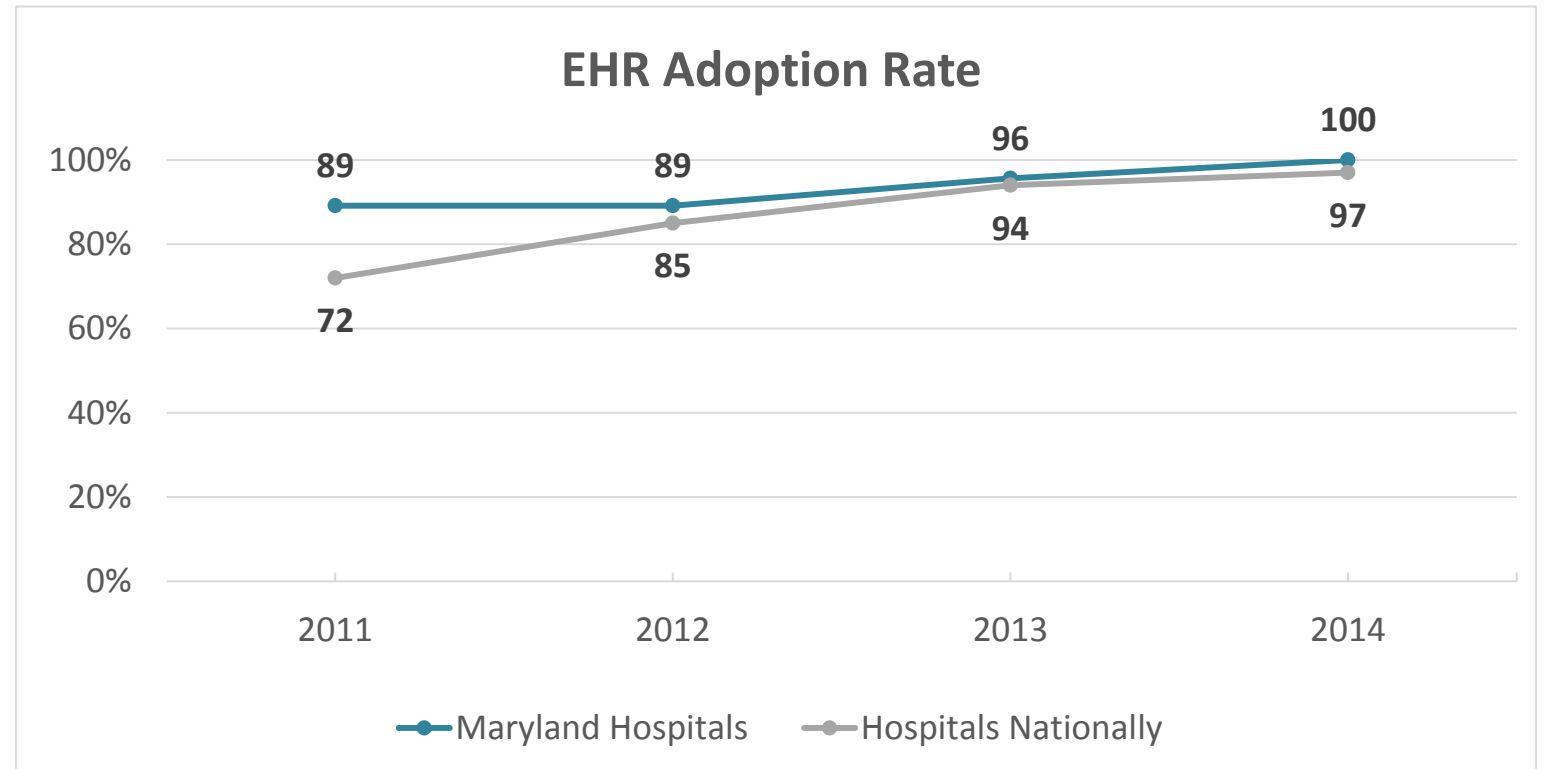
Types of Health IT Assessed

- EHRs
- Computerized physician order entry (CPOE)
- Electronic prescribing (e-prescribing)
- Electronic medication administration record (eMAR)
- Bar code medication administration (BCMA)
- Clinical decision support (CDS)
- Patient portals
- Telehealth
- Health information exchange (HIE)
- Population health management tools

Key Findings

EHRs

- All Maryland hospitals have implemented a certified EHR
- Three EHR systems are used by over 80 percent of hospitals:
 - Meditech
 - Cerner
 - Epic



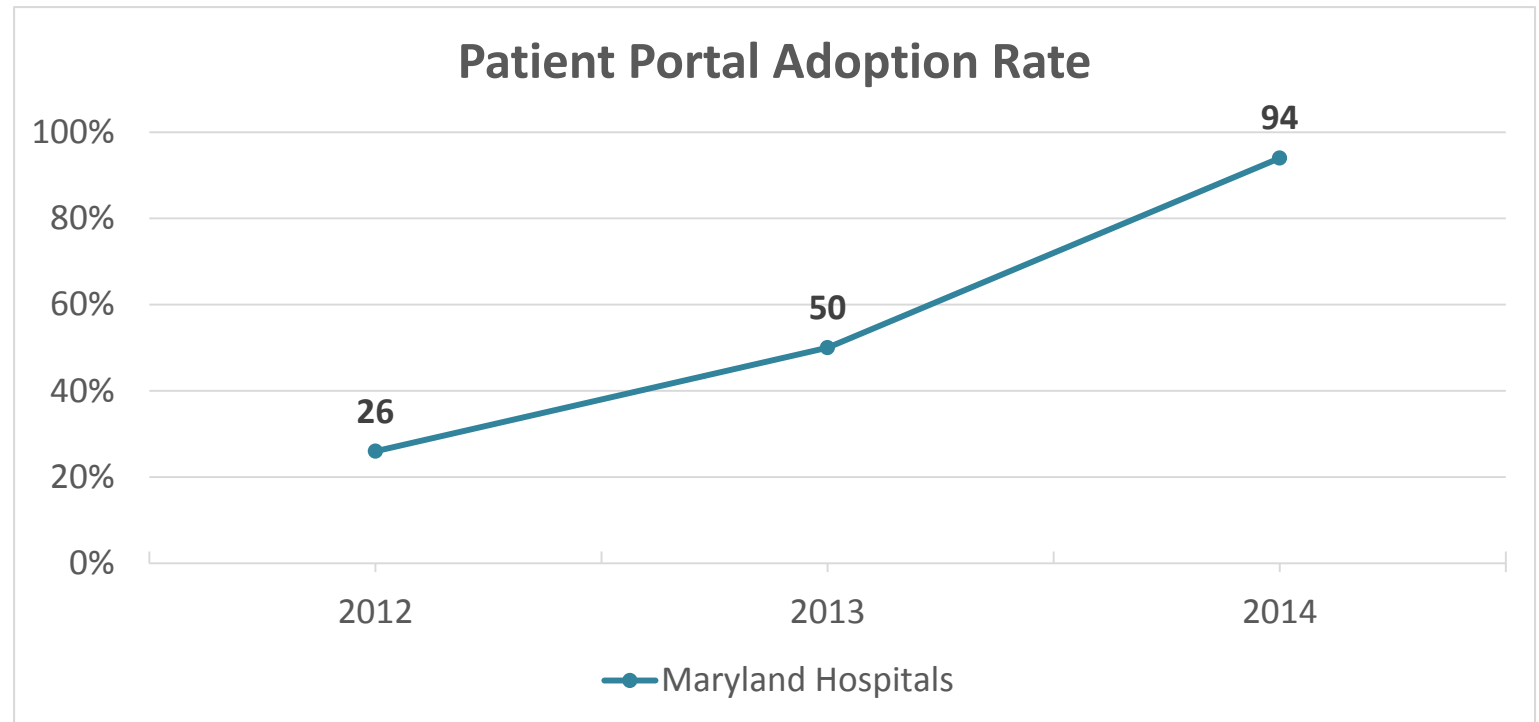
Core EHR Components

- All hospitals use three out of five EHR components identified in meaningful use
- e-Prescribing of discharge medications to external pharmacies grew by 37 percent from 2010 to 2014
- Hospital adoption of e-prescribing is expected to continue under health care reform

Core EHR Components %						
Technology		CPOE	CDS	eMARs	BCMA	e-Prescribing
Adoption Rate	2010 N=44	77	70	79	62	19
	2014 N=47	100	100	100	98	68
Growth Rate		7	7	6	12	37

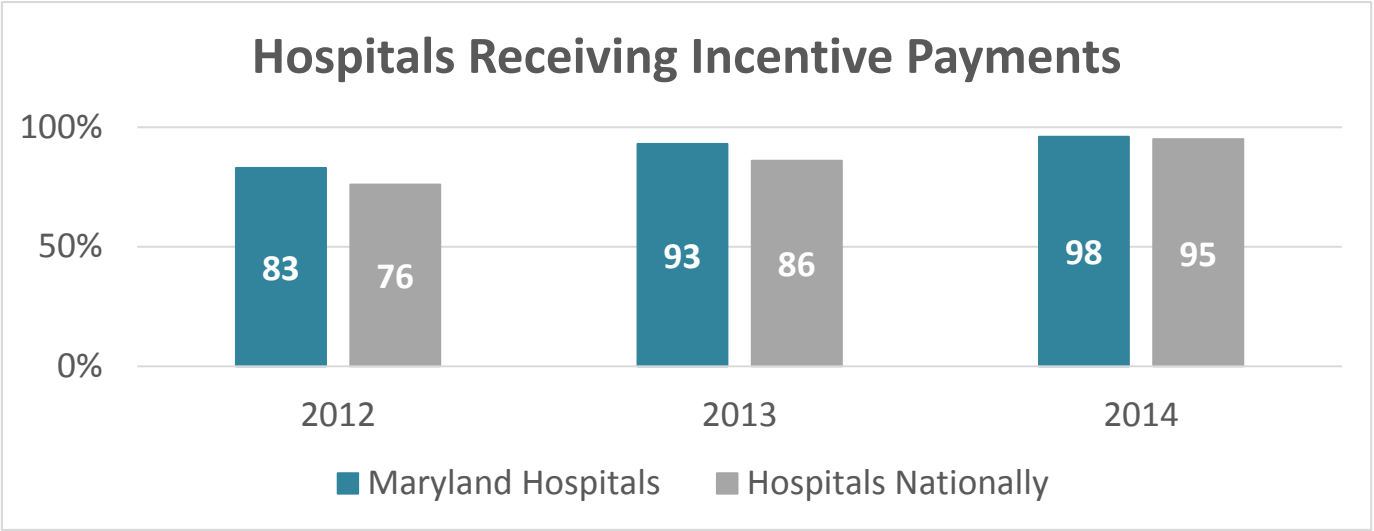
Patient Portals

- Patient portal adoption increased most rapidly in recent years, growing at a rate of about 92 percent from 2012 to 2014
- The top three patient portal functionalities provided by most hospitals include:
 - Access visit summary
 - Check test results
 - Download information on hospital admission



Medicare & Medicaid EHR Incentive Programs

- Maryland continues to lead the nation in the percent of hospitals that have received EHR incentive payments
- Collectively, hospitals have received over \$18B; Maryland hospitals have received approximately \$272M
- About 32 percent of hospitals have been audited for meaningful use compliance by the federal government and there were no adverse findings; nationally, there have been over 600 audits of hospitals with a 4.9 percent failure rate



Incentive Payments - Combined			
N=47			
Hospital Type N=47	Share %		
	Medicare	Medicaid	Medicare & Medicaid
Health Systems N=24	44.2	55.2	47.4
Community Hospitals N=23	55.8	44.8	52.6

HIE

- Since 2013, hospital submission of radiology, transcribed, and laboratory data to CRISP increased by 22 percent
- Nearly 30 percent of hospitals implemented functionality over the past year to begin sending continuity of care documents (CCDs) to CRISP
- Most hospitals expressed interest in CRISP supporting radiology image sharing and eMOLST forms
- Five hospitals share clinical information with community-based HIEs that are registered with MHCC

Hospital Data Submission to CRISP	
N=47	
Type of Data	Hospitals %
ADT	100
Radiology <i>(Report)</i>	98
Transcribed <i>(Report)</i>	94
Laboratory	89
CCDs <i>(Patient-Level Summaries)</i>	30

Telehealth

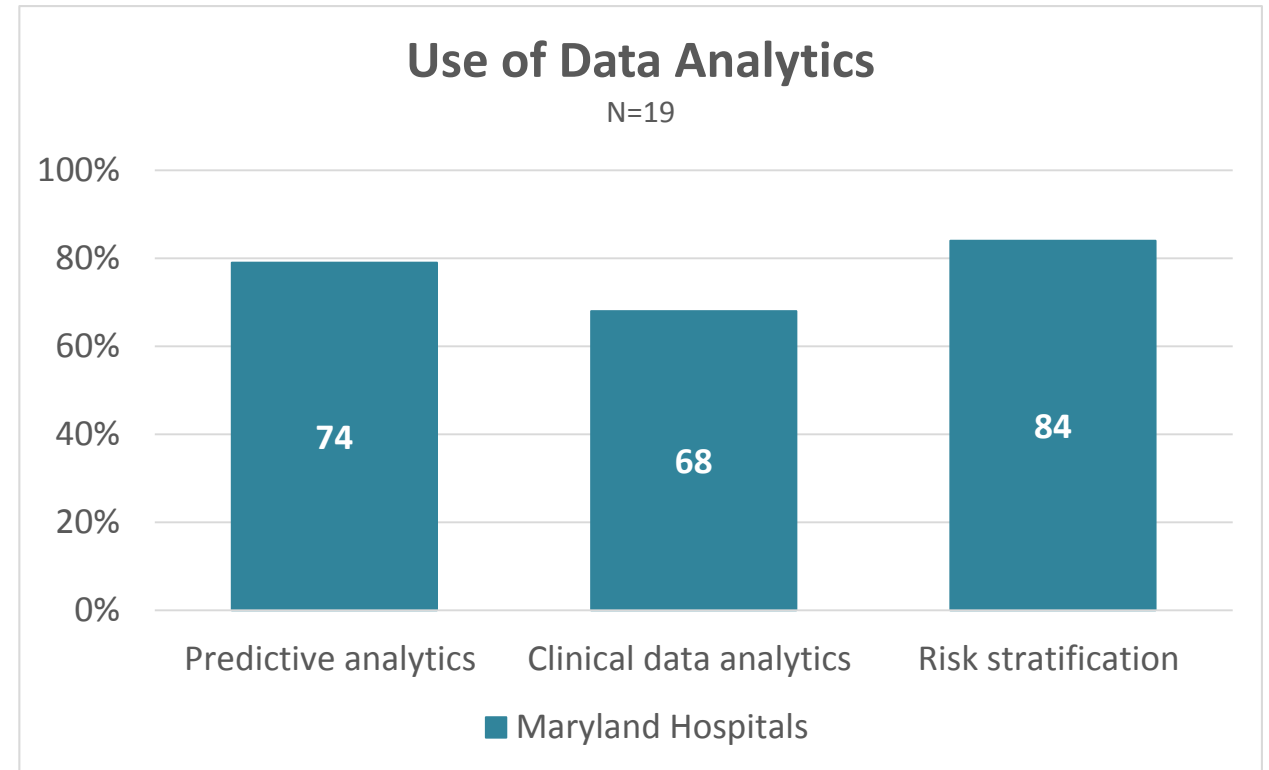
- Approximately 64 percent of hospitals report having telehealth capabilities compared to 52 percent of hospitals nationally
- Since 2013, teleconsultations and emergency telehealth services has nearly tripled
- Use of interactive audio/video technology ranks highest

Telehealth Services	
N=30	
Type of Service	%
Teleradiology	83
Teleconsultation	69
Emergency	45
Remote Monitoring	41
Telediagnosis	34
Telebehavioral Health	17

Telehealth Technologies	
N=30	
Type of Technology	%
Interactive Audio/Video	52
Mobile Devices	21
Home Monitoring Devices	17

Population Health Management

- Roughly 40 percent of hospitals have implemented systems to support population health management
 - 10 academic hospitals
 - 9 community hospitals
- Over three quarters of hospitals began using data analytic tools in recent years
 - About 47 percent report using all three types of data analytics tools
- Around 36 percent of hospitals use electronic care plans



Thank You!



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Appendix

Patient Portal Functionalities Hospitals N=44	
Administrative	%
E-mail provider	30
Pay bill	32
Pre-register for services	14
Request electronic copy of medical record	27
Update insurance information	16
Clinical	
Accept patient-generated data	16
Access visit summary	93
Check test results	91
Download information on hospital admission	86
Renew/refill prescription	27
Self-management tools for chronic conditions	20

Appendix *(Continued...)*

